N78-72698

Unclas
03009
00/43

(NASA-News-Release-78-9) LANDSAT 1 EARTH RESOURCES SATELLITE IS RETIRED (National Aeronautics and Space Administration) 3 p

NASA News

National Aeronautics and
Space Administration

Washington, D.C. 20546
AC 202 755-8370

For Release:

IMMEDIATE

Dick McCormack
Headquarters, Washington, D.C.
(Phone: 202/755-8583)

Joe McRoberts
Goddard Space Flight Center, Greenbelt, Md.
(Phone: 301/982-4955)

RELEASE NO: 78-9

LANDSAT 1 EARTH RESOURCES SATELLITE IS RETIRED

Landsat 1, the world's first spacecraft designed to monitor and discover the Earth's natural resources was retired by NASA Jan. 16, 1978, after operating five and a half years in outer space. The multispectral scanner, a camera-like device carried by Landsat 1, has revolutionized the technology of observing the Earth from space.

Designed with a life expectancy of only one year, Landsat 1 was launched in 1972. The spacecraft "more than achieved its goals, in fact, beyond any stretch of the imagination," said Ron Browning, Landsat Project Manager at NASA's Goddard Space Flight Center in Greenbelt, Md.

-more-

Mailed
January 23, 1978

Browning said problems with the pitch wheel, the device which automatically keeps the satellite and its instruments pointed toward the Earth, have worsened during the past two years and that time-command problems have also developed. Both tape recorders on the satellite have long been inoperative, the first stopping in August, 1972 and the second in July 1974.

Since the latter date the satellite has been transmitting its images of Earth directly to ground stations around the globe as they came within the satellite's range. Problems with the pitch wheel brought these operations to a halt.

Landsat 2, launched in 1975, is still in orbit and will be joined by a third Landsat in March of this year. The instruments on this third Landsat will be improved versions of those carried by the first two.

Landsat 1's more than 300,000 pictures of different parts of the world demonstrated the potential of remote sensing from Earth resources spacecraft in the fields of geology, oceanography, agriculture, forestry, hydrology, urban planning, crop prediction and many other resources disciplines.

Such data are important to the United States and the rest of the world as well. Global analysis of food and mineral resources alone are important to economic planners worldwide. These data can be updated rapidly and frequently as the Landsat spacecraft covers each point on the globe every 18 days returning 80-meter (240-feet) resolution pictures of Earth in 185 kilometer (115 miles) by 185 km segments, in four spectral bands, as it passes 915 km (570 mi.) overhead.

Data received from the Landsat satellites are received by three U.S. ground stations as well as one each in Canada, Brazil and Italy. The information is sold to users for nominal fees. Two more stations are under construction in Iran and Japan and another is planned by Argentina.

Data received by U.S. stations are sent to Goddard for pre-processing and distributed to data distribution facilities of the Department of Interior, Department of Agriculture and the National Oceanic and Atmospheric Administration.

-end-